

## REMARKS

Responsive to the Official Action mailed February 13, 2003, applicant has amended the claims of her application in an earnest effort to place this case in condition for allowance. Specifically, independent claim 1, 6, and 8 have been amended, and new dependent claims 9 and 10 added. Reconsideration is respectfully requested.

As discussed in the specification, the present invention contemplates a particularly effective composition for controlling odor in a disposable hygiene product, which comprises hydroxydiphenyl ether in a modified acidic carrier. Notably, the specification discloses incorporation of this odor control composition in a disposable hygiene product in two distinctly different ways, either of which can be particularly advantageous for specific applications.

In one embodiment of the invention, an admixture of the hydroxydiphenyl ether in modified acidic carrier is formed, and is applied topically to a base substrate material of the disposable hygiene product, such as a film, fiber, filament, or like component of the hygiene product. In an alternate embodiment, the substrate material of the hygiene product is formed from a polymeric composition containing therein the hydroxydiphenyl ether, with the modified acidic carrier of the odor control composition applied to the base substrate material. In this form of the invention, the hydroxydiphenyl ether blooms to the surface of a construct, such as a fiber, filament, or film, formed from the polymeric composition, such that interaction with the modified acidic carrier can readily occur. ~

In the Action, the Examiner has rejected the pending claims under 35 U.S.C. §103, with reliance upon PCT Publication No. WO 99/38541, to Nakamura, and under 35

U.S.C. §103, with reliance upon the Nakamura reference, in view of U.S. Patent No. 6,287,634, to Beall et al. However, a careful study of these references shows that these references, either singly or in combination, do not teach or suggest applicant's odor control composition and method for incorporation of such a composition in a disposable hygiene product. Accordingly, the Examiner's rejections are respectfully traversed.

In the Action, the Examiner has made reference to the Nakamura reference for its disclosure relating to the provision of a anti-microbial agent in association with a hydrogel-forming absorbent polymer. As will be appreciated, this is clearly very distinct from the present invention, as claimed, wherein applicant's odor control composition can be either topically applied to, or incorporated in, a base substrate material of a hygiene product. Those skilled in the art recognize that hydrogen-forming polymer compositions are typically employed in the form of particulate material, such as blended with wood pulp fluff, for use in disposable absorbent products, and would not be understood to constitute "a base substrate material", as specified in the claims.

Notwithstanding this fundamental shortcoming in the teachings of Nakamura, the presence of the hydrogel-forming polymeric composition is critical to the Examiner's rejection, since the Examiner has made reference to the disclosure of Nakamura specifying that such as hydrogel-forming absorbent polymer can be provided in the form of an aliphatic acid. Adhesion of antimicrobial agent to the hydrogel particles is contemplated.

This is clearly distinct from applicant's composition as claimed, wherein applicant's odor control composition, comprising a hydroxydiphenyl ether in a modified

acidic carrier, is *provided on a base substrate material* of the disposable hygiene product.

There is no teaching or suggestion of such an arrangement in the principal Nakamura reference. In fact, Nakamura can readily be interpreted to *teach away* from such an arrangement, since adherence of the antimicrobial agent to the hydrogel-forming polymeric particles is the object of Nakamura. The provision of applicant's claimed odor control composition on a base substrate of a disposable article is clearly completely distinct from Nakamura's disclosure of a combination antimicrobial/hydrogel-forming polymer.

As further specified in the claims, applicant's odor control composition can be provided on the base substrate material by providing the hydroxydiphenyl ether in the polymer from which the base material is formed, and thereafter applying the modified acidic carrier thereto, or alternatively, by applying the composition in the form of an admixture of the hydroxydiphenyl ether and the modified acidic carrier to the base substrate material. cf. 8

In the Action, the Examiner has stated that Nakamura discloses a method for controlling odor "comprising the steps of: a) providing a base substrate material, b) providing an odor control compound, c) the odor control compound comprising an admixture of hydroxydiphenyl ether in a modified acidic carrier, d) applying the odor control compound topically to the base substrate material, and e) subsequently forming the treated base substrate material into component material for disposable sanitary product". Applicant must respectfully, strongly disagree with this interpretation of the teachings of Nakamura. To the extent Nakamura could be broadly interpreted as teaching

the formation of an admixture, there is clearly no teaching whatsoever in this reference of applying such an admixture topically to a base substrate material of the associated absorbent article. Nor can there be any reasonable interpretation of the Nakamura teachings which would lead one skilled in the art to conclude that this reference teaches forming such a treated base material into a component of the sanitary product. Again, Nakamura is limited in its teachings to the formation of a hydrogel-forming polymer compound with an antimicrobial agent applied thereto, such that this modified polymeric compound can subsequently be used as an absorbent medium in a disposable absorbent product.

It should also be noted that such teachings in Nakamura simply cannot be reasonably interpreted as suggesting the incorporation of the claimed hydroxydiphenyl ether in a polymeric material from which a base substrate material is formed, with the application of the recited acidic carrier to the substrate material forming the claimed odor control composition.

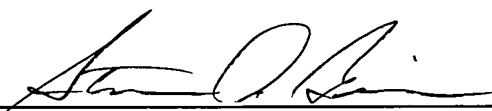
In the Action, the Examiner has relied upon the Beall et al. reference, acknowledging that Nakamura does not disclose an aliphatic acid in the form of a hexanedioic acid. However, it is respectfully maintained that such a combination, even if obvious to those skilled in the art, does not teach or suggest applicant's claimed composition and method. As noted, the Nakamura patent contemplates use of an acid (i.e., the hydrogel-forming polymer) for a distinct and separate purpose than as disclosed in the present invention. Similarly, Beall et al. contemplates the use of a hexanedioic acid for a different purpose than that specified, that is, for incorporation in compositions that

include cosmetic, industrial, and medicinal compounds that act upon contact with the skin or hair. Again, like the principal Nakamura reference, there is no teaching or suggestion in Beall et al. of providing applicant's claimed odor control composition on a base substrate material of a disposable hygiene product. In absence of such teachings in the relied-upon references, it is respectfully maintained that applicant's invention is clearly patentably distinct from the prior art.

In view of the forgoing, formal allowance of claims 1-10 is believed to be in order and is respectfully solicited. Should the Examiner wish to speak with applicant's attorneys, they may be reached at the number indicated below.

The Commissioner is hereby authorized to charge any additional fee which may be required in connection with this submission to Deposit Account No. 23-0785.

Respectfully submitted,

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I hereby certify that this Amendment is being deposited with the United States Postal Service with sufficient postage at First Class Mail in an envelope addressed to:  
Mail Stop Patent Application Commissioner for Patents, P.O. Box 1450, Alexandria,  
Virginia 22313-1450 on **May 13, 2003**.



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